
Subject: Re: Z-Graphics Buffer Resolution
Posted by [David Fanning](#) on Wed, 27 Oct 2010 20:37:43 GMT
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David Fanning writes:

- > I am looking for someone with a better memory than mine.
- > I've run into that old problem where the character size
- > is different in the Z-graphics buffer than it is on the
- > display, so that things just don't QUITE line up when
- > you want them to. I would have thought I would have
- > written an article about this, but apparently not.
- > Maybe I'm mis-remembering what actually causes the problem.
- > In any case, it seems the plot margins are not completely
- > aligned.

Never mind. I found the information I was looking for
in my book, of all places. :-)

Cheers,

David

--

David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: Z-Graphics Buffer Resolution
Posted by [Kenneth P. Bowman](#) on Thu, 28 Oct 2010 14:52:07 GMT
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In article <MPG.2732370f498ced4a989812@news.giganews.com>,
David Fanning <news@dfanning.com> wrote:

- > Folks,
- >
- > I am looking for someone with a better memory than mine.
- > I've run into that old problem where the character size
- > is different in the Z-graphics buffer than it is on the
- > display, so that things just don't QUITE line up when
- > you want them to. I would have thought I would have
- > written an article about this, but apparently not.
- > Maybe I'm mis-remembering what actually causes the problem.
- > In any case, it seems the plot margins are not completely

> aligned.

Isn't this due to differences for the default values of !D.X_CH_SIZE and !D.Y_CH_SIZE for different devices?

Ken Bowman

Subject: Re: Z-Graphics Buffer Resolution
Posted by [David Fanning](#) on Thu, 28 Oct 2010 15:14:13 GMT
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Kenneth P. Bowman writes:

> Isn't this due to differences for the default values of
> !D.X_CH_SIZE and !D.Y_CH_SIZE for different devices?

Well, these are system variables, so they wouldn't change, but there *is* something about the character size in the Z-buffer that is different. A "different" default character size, it seems to me. You can solve the problem either by explicitly setting the CHARSIZE keyword (so you use those system variables above), or by explicitly setting the plot margins, so the plot region doesn't move around in character size units.

I'm having some EXTREMELY interesting fun with the Z-buffer this morning. If I set the buffer to use decomposed color, and I write three orthogonal images into the buffer with different color tables, then take a "picture" of the result:

```
picture = TVRD(True=3)
```

And display that, I get three small thumbnail images instead of the one large image I want! I have NO idea at the moment what the heck is going on here! :-)

Cheers,

David

--

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Subject: Re: Z-Graphics Buffer Resolution
Posted by [David Fanning](#) on Thu, 28 Oct 2010 15:23:19 GMT
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David Fanning writes:

> And display that, I get three small thumbnail images instead
> of the one large image I want! I have NO idea at the moment
> what the heck is going on here! :-)

Need I mention that the Z-graphics buffer help is gone
from IDL 8? :-)

Cheers,

David

--

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Subject: Re: Z-Graphics Buffer Resolution
Posted by [David Fanning](#) on Thu, 28 Oct 2010 15:37:09 GMT
[View Forum Message](#) <> [Reply to Message](#)

David Fanning writes:

>
> David Fanning writes:
>
>> And display that, I get three small thumbnail images instead
>> of the one large image I want! I have NO idea at the moment
>> what the heck is going on here! :-)
>
> Need I mention that the Z-graphics buffer help is gone
> from IDL 8? :-)

Ok, sorted it out, once I found the Help files in IDL 7.
Very, very neat! :-)

Cheers,

David

--

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Subject: Re: Z-Graphics Buffer Resolution
Posted by [Heinz Stege](#) on Thu, 28 Oct 2010 16:07:46 GMT
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On Thu, 28 Oct 2010 09:14:13 -0600, David Fanning wrote:

> Kenneth P. Bowman writes:
>
>> Isn't this due to differences for the default values of
>> !D.X_CH_SIZE and !D.Y_CH_SIZE for different devices?
>
> Well, these are system variables, so they wouldn't change,

I'm not sure, if I'm getting something wrong. You can change the character size with the device procedure:

```
device,set_character_size=[x_ch_size,y_ch_size]
```

Don't know, if it helps.

Heinz

Subject: Re: Z-Graphics Buffer Resolution
Posted by [David Fanning](#) on Thu, 28 Oct 2010 16:19:13 GMT
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Heinz Stege writes:

> I'm not sure, if I'm getting something wrong. You can change the
> character size with the device procedure:
> device,set_character_size=[x_ch_size,y_ch_size]
>
> Don't know, if it helps.

Yes, of course, but this is not the Z-graphics buffer issue we are talking about. The *default* character size is different in the Z-buffer than it is on your display. If you *set* the character size in your graphics commands with CharSize, all is well.

Charsize uses the character size set with the Device command above as its Charsize=1.0 character size.

Cheers,

David

--

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Subject: Re: Z-Graphics Buffer Resolution
Posted by [David Fanning](#) on Thu, 28 Oct 2010 16:24:14 GMT
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Heinz Stege writes:

> I'm not sure, if I'm getting something wrong. You can change the
> character size with the device procedure:
> device,set_character_size=[x_ch_size,y_ch_size]

I should point out, too, that those of us with aging eyesight are well familiar with this method of setting the character size. You will find this command in almost of our IDL start-up files. :-)

Cheers,

David

P.S. Let's just say when I see a monitor size larger than about 1280, I know that person is under 40. :-)

--

David Fanning, Ph.D.
Fanning Software Consulting, Inc.
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Subject: Re: Z-Graphics Buffer Resolution
Posted by [Kenneth P. Bowman](#) on Thu, 28 Oct 2010 16:38:49 GMT

[View Forum Message](#) <> [Reply to Message](#)

In article <MPG.2733519b29c732bc989819@news.giganews.com>, David Fanning <news@dfanning.com> wrote:

> P.S. Let's just say when I see a monitor size larger
> than about 1280, I know that person is under 40. :-)

IDL> help, /device
Current graphics device: X
Display Depth, Size: 24 bits, (2560,1578)

You just have to find the right pair of workstation glasses
(and view Word documents at 150%).

At these prices, and with a good optometrist, you can afford to
try a few

<http://www.zennioptical.com/>

Ken

Subject: Re: Z-Graphics Buffer Resolution
Posted by [David Fanning](#) on Thu, 28 Oct 2010 17:09:44 GMT
[View Forum Message](#) <> [Reply to Message](#)

Kenneth P. Bowman writes:

> At these prices, and with a good optometrist, you can afford to
> try a few
>
> <http://www.zennioptical.com/>

I'll have to check it out. I play tennis with a guy
in our regular Wednesday night group, and he probably
hasn't won three sets in two years, playing with any
of us. Since September no one moans when you have to play
with him. He's been terrific. The difference? He got
glasses!

Maybe this is the answer to keeping up with those
young hotshots!

Cheers,

David

P.S. Let's just say staring at a computer all day isn't exactly doing wonders for my far vision, at night, under lights, with balls coming at my head in excess of 100 mph. :-)

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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Subject: Re: Z-Graphics Buffer Resolution

Posted by [Heinz Stege](#) on Thu, 28 Oct 2010 18:15:24 GMT

[View Forum Message](#) <> [Reply to Message](#)

On Thu, 28 Oct 2010 10:24:14 -0600, David Fanning wrote:

> Heinz Stege writes:

>

>> I'm not sure, if I'm getting something wrong. You can change the

>> character size with the device procedure:

>> `device,set_character_size=[x_ch_size,y_ch_size]`

>

> I should point out, too, that those of us with aging
> eyesight are well familiar with this method of setting
> the character size. You will find this command in almost
> of our IDL start-up files. :-)

>

> Cheers,

>

> David

>

> P.S. Let's just say when I see a monitor size larger
> than about 1280, I know that person is under 40. :-)

Yes, I know. From my very own experiences. In the beginning of this aging process it helps to increase the character size. But then, let us say 5 years later, there is no other way but eye glasses. ;-(

If you change the character size by a device command within your start-up file, please let me warn you. Don't forget to do it for *both* devices, the win- or x-device *and* the z-device. ;-(

Cheers, Heinz
